Table 1. Deleted Level 4 PLS Requirements

L4 ID	req_key	rel	req_type	ver_method	ver_status	clarification	text
~~S-PLS-00190~~	~~11627~~	~~B1~~	~~interface~~	~~test~~	~~unverified~~		~~The PLANG CI shall forward a response message to the Data Server indicating acceptance / rejection status of the updates to the Production Request for On-Demand Data Products .~~
~~S-PLS-00322~~	~~10180~~	~~B1~~	~~functional~~	~~demo~~	~~unverified~~	~~Shared allocation means a resource may be allocated to more than one event.~~	~~The PLANG CI shall provide the capable capability of setting up dependencies between services and hardware resources.~~
~~S-PLS-00656~~	~~11638~~	~~B1~~	~~interface~~	~~test~~	~~unverified~~		~~The PLANG CI shall send a response message to Data Server upon receiving FOS plan and schedule, confirming the receiving of the data~~
~~S-PLS-00665~~	~~11639~~	~~B1~~	~~functional~~	~~test~~	~~unverified~~		~~The PLANG CI shall notify the operations staff (via GUI) have available via the MSS event logging, information about the arrival of any Data Availability Schedule Notice corresponding to a DAS.~~
~~S-PLS-00740~~	~~10834~~	~~B0~~	~~functional~~	~~demo~~	~~unverified~~	~~Support for parallel Planning and Data Processing capability to be provided for AIT Support for completely parallel operations and AIT testing not available until Rel. A.1B.0. Is "Rel. A.1" still valid?~~	~~The PLANG CI shall have the capability to schedule algorithm test Data Processing Requests that do not interfere with the operational production environment.~~
~~S-PLS-00827~~	~~11645~~	~~B1~~	~~procedural~~	~~demo~~	~~unverified~~		~~The PLANG CI shall update the quality assurance status of input data (if applicable) to reflect an expired QA timeout period if its quality assurance information has not been received within specified time periods.~~
~~S-PLS-01230~~	~~11650~~	~~B0~~	~~functional~~	~~test~~	~~unverified~~		~~The PLANG CI shall support the display (via GUI) of warning messages to the operations staff indicating revised completion times if processing will not complete per original schedule.~~
~~S-PLS-02000~~	~~11651~~	~~B1~~	~~functional~~	~~test~~	~~unverified~~		~~The PLANG CI shall be able to accept scheduling information on external events which affect processing resources and operations~~

L4 ID	req_key	rel	req_type	ver_method	ver_status	clarification	text
~~S-PLS-02020~~	~~11653~~	~~B1~~	~~functional~~	~~test~~	~~unverified~~		~~The PLANG CI shall be able to provide operations personnel priorities and planned execution times of jobs causing scheduling conflicts within and between DAACs~~.

Table 2. Modify Level 4 PLS Requirements

S-PLS-00130	11620	B1	interface	test	unverified	PLS never rejects an On -Demand .	The PLANG CI shall send a response message to the Data Server confirming the acceptance status of the received Production Request for On-Demand Data Products (" accepted", ~~"rejected",~~ "deferred") ~~and reason for rejection of a request (if applicable)~~. The response message accompanying the acceptance message shall indicate the estimated time of completion.
S-PLS-00140	11621	B1	interface	test	unverified	There are separate thresholds for DSS and DPS	Upon acceptance of a Production Request for an On-Demand Data Product, the PLANG CI shall immediately forward its corresponding Data Processing Requests to the PRONG CI if predefined resource thresholds are not exceeded ~~and if the input data is available.~~
S-PLS-00150	11624	B1	functional	test	unverified	There are separate thresholds for DSS and DPS	The PLANG CI shall defer On-Demand Production Requests for future plan generation consideration when these On-Demand Production Requests are estimated to exceed a predefined resource threshold.
S-PLS-00160	11623	B1	functional	test	unverified	There are separate thresholds for DSS and DPS	~~If a Production Request for an On-Demand Data Product exceeds a predefined resource usage threshold, the PLANG CI shall notify the operations staff that the Production Request has been deferred.~~ The PLANG CI shall notify the operations staff of the deferral of a Production Request when the Limited Automatic Replan limits have been exceeded.
S-PLS-00165	11625	B1	functional operational	test	unverified	The wall clock time, cumulative wall clock time, ram and Disk space are the operator configurable thresholds. There are separate thresholds for DSS and DPS	The PLANG CI shall allow the operator to specify the resource usage thresholds used to accept or defer On-Demand Production Requests.
S-PLS-	11626	B1	functional	test	unverified		The PLANG CI shall accept

L4 ID	req_key	rel	req_type	ver_method	ver_status	clarification	text
00170							~~updates (modifications/~~ cancellations~~)~~ to Production Requests for On-Demand Data Products from the Data server .
S-PLS-00355	10187	B1	functional	test	unverified	~~Shared allocation means a resource may be allocated to more than one event.~~	The PLANG CI shall provide the capability to generate reports providing a comparison of planned vs. actual resource usage.
S-PLS-00360	10188	B1	interface	test	unverified	~~Shared allocation means a resource may be allocated to more than one event.~~	The PLANG CI shall be able to provide site resource plans to PLANG CI's at other sites.
S-PLS-00365	10189	B1	interface	test	unverified	~~Shared allocation means a resource may be allocated to more than one event.~~	The PLANG CI shall be able to import saved site resource plans from other site PLANG CIs.
S-PLS-00370	10190	B1	functional	test	unverified	~~Shared allocation means a resource may be allocated to more than one event.~~	The PLANG CI shall be able to save site resource plans to a file.
S-PLS-00375	10191	B1	functional	test	unverified	~~Shared allocation means a resource may be allocated to more than one event.~~	The PLANG CI shall provide the capability to initiate a site ground event script associated with a resource request in the resource plan at the planned for time.
S-PLS-00407	11629	B0	functional	test	unverified		The PLANG CI shall be capable of storing ~~maintain Product Generation Executives (PGEs)~~ information necessary to support the production of tile or spatial-based output Granules.
S-PLS-00445	11630	B0	functional	test	unverified		The PLANG CI shall maintain multiple Production Strategies defined by the following sets of ~~Production Rules~~ priorities: user type, PR type, PGE type, to be used when ~~preparing~~ creating a Production Plan.
S-PLS-00455	11631	B0	functional operational	test	unverified		The PLANG CI shall support the capability that allows the operations staff to update (enter/ modify/ delete) the Production Strategies (via GUI).
S-PLS-00604	11632	B0	functional	test	unverified		The PLANG CI shall ~~receive~~ retrieve advertisements from the IOS.
S-PLS-00631	11633	B1	functional	test	unverified		The PLANG CI shall have the capability of ~~receive~~ receiving ~~Data Availability Schedule Notices~~ Subscription Notifications indicating the arrival of Data Availability Schedules (DAS) for any remote

							ECS site~~, any IP, and any ODC~~ that makes a Data Availability Schedules available.
S-PLS-00635	11634	B1	interface	test	unverified		The PLANG CI shall be capable of receiving ~~receive Data Availability Schedule Notices~~ Subscription Notifications indicating arrival of FOS ~~plans and~~ schedules
S-PLS-00651	11635	B1	functional	test	unverified		The PLANG CI shall ~~accept~~ have the capability of acquiring Planning Data Availability Schedules (PDAS), for remote ECS sites, ~~IPs, and ODCs~~, from the data server, based on the ~~Data Availability Schedule Notices~~ Subscription Notifications received.
S-PLS-00652	11636	B1	interface	test	unverified		The PLANG CI shall have ~~support~~ the capability to retrieve FOS ~~plans and~~ schedules from ~~the Data Server~~ FOS.
S-PLS-00654	11637	B1	functional	test	unverified		The PLANG CI shall create a Data Availability Schedule (DAS) for EDOS based on FOS ~~plans and~~ schedules acquired from FOS once notification of a new FOS schedule has been received from the DSS.
S-PLS-00700	11640	B1	functional	test	unverified	Timeline is a predicted estimation and will change as events unfold.	The PLANG CI shall create a Candidate Plan specifying a timeline for PGE execution that will satisfy Production Requests for Reprocessing and On-Demand Data Products consistent with available and allocated processing resources.
S-PLS-00710	10662	A	functional	test	unverified	PLANG capabilities are listed because they are incorporated in Standard Processing.	The PLANG CI shall create a Candidate Plan based on the following: 1. ~~Outstanding~~ Selected production requests, their priorities and estimated run times, 2. Ground events and their ~~priority and~~ estimated duration, 3. Planning production rules, 4. Data Processing Request dependencies, 5. Completion status ~~from~~ of Data Processing Requests associated with the selected Production Requests.
S-PLS-00715	10194	B1	functional	test	unverified		The PLANG CI shall be able to provide a high-level~~, aggregate~~ view of production plans based on Production Requests.
S-PLS-	11641	B1	functional	test	unverified		The PLANG CI shall create a

L4 ID	req_key	rel	req_type	ver_method	ver_status	clarification	text
00720							Candidate Plan based on the data availability schedules for remote ECS sites~~,~~ and EDOS~~, the IPs, and ODCs,~~ as needed.
S-PLS-00850	11647	B1	functional	test	unverified		The PLANG CI shall have the capability to generate planning data availability schedules (and the corresponding metadata) that reflect the Data Products expected to be generated in the Production Plan.
S-PLS-01040	10113	B1	interface functional	demo	unverified	Order tracking is an MSS provided capability	The PLANG CI shall ~~send the current processing~~ update the status of Production Requests~~(~~for On-Demand Data Products~~)~~ upon the activation of a plan ~~to the originating Data Server.~~ through order tracking.
S-PLS-02010	11652	B1	functional	test	unverified		The PLANG CI shall be able to identify ~~scheduling conflicts in site production plans~~ Production Requests that are not predicted to be completed by the target date.
S-PLS-02030	11654	B1	functional	test	unverified		The PLANG CI shall identify conflicts in site production plans caused by cross-DAAC data dependency where a Production Request that is no longer predicted to be completed by the specified target date may affect production at another site.
S-PLS-02040	11655	B1	functional	test	unverified		The PLANG CI shall be ~~able to display (via GUI)~~ capable of providing cross-DAAC data dependencies information in production plans.
S-PLS-02050	11847	B1	functional	test	unverified		The PLANG CI shall be able to provide production plans to PLANG CIs at other sites via the data server.
S-PLS-02200	10101	B1	functional	test	unverified		The PLANG CI shall have the capability to extract temporal subsets from a production or resource plan ~~and save them to a file.~~ and send electronic copies to the designated local data server for storage and distribution.
S-PLS-02400	10116	B1	functional	inspection	unverified	~~This is a static list, provided at delivery.~~	The PLANG CI shall notify the operator when a ~~provide a list of~~ replan event~~s which will cause the user to be notified and given the option to replan.~~ has occurred.
S-PLS-02430	10119	B1	functional	test	unverified		The PLANG CI shall consider the submission of an On-

L4 ID	req_key	rel	req_type	ver_method	ver_status	clarification	text
							Demand Production Request to be a replan event if the resource requirements exceed Limited Automatic Replan predefined thresholds.
S-PLS-02530	10648	B0	functional	test	unverified	The intent is to provide the capability to run a PGE some subset of the number of times it is possible to be run. For example, it may be desired to have a PGE which works on a daily data set to run only every fifth day.	The PLANG CI shall be capable of planning a subset of Data processing Requests (DPRs) that are generated from a ~~Processing~~ Production Request (PR) based upon a "keep" parameter and a "skip" parameter which establish a repeatable pattern of the DPRs to be run or not run.

Table 3. New Level 4 PLS Requirements

L4 ID	req_key	rel	req_type	ver_method	ver_status	clarification	text
S-PLS-00406	NEW	B1	functional operational	test	unverified		The PLANG CI shall allow the operator to alter the values used to check the metadata fields of input data for Production Requests which require these checks as execution criteria.
S-PLS-00717	NEW	B1	functional operational	test	unverified		The PLANG CI shall be able to provide the operator the ability to define a color for each PR or PR type for display on the timeline for production plans.
S-PLS-00718	NEW	B1	functional operational	test	unverified		The PLANG CI shall be able to filter out operator selected PRs or PR types on the timeline display for production plans.
S-PLS-01050	NEW	B1	functional	test	unverified		On receiving an On-Demand Production Request from Processing for error handling, The PLANG CI shall be capable of replacing the failed DPR in the Processing Queue with the DPR from the On-Demand Production Request.
S-PLS-01221	NEW	B1	functional	test	unverified		The PLANG CI shall provide the capability to concurrently handle multiple routine, reprocessing, and on-demand Production Requests using the same PGE and requiring the same input data.
S-PLS-01900	NEW	B1	functional	test	unverified		The PLANG CI shall provide the capability to define Production Request Collections which contain other Production Requests.
S-PLS-02001	NEW	B1	functional	test	unverified		The PLANG CI shall account for the resource usage of predicted on-demand requests when creating a candidate plan.
S-PLS-02034	NEW	B1	functional	test	unverified		The PLANG CI shall increase, by a configurable amount, the calculated priority of an

L4 ID	req_key	rel	req_type	ver_method	ver_status	clarification	text
							activity if the DPR was already selected to be in a previous active plan , but has not yet been completed.
S-PLS-02036	NEW	B1	functional interface	test	unverified	This requirement describes the process of increasing the priority of jobs with inter-DAAC dependencies.	The PLANG CI shall provide an amount to be added to the calculated priority of an activity if the DPR produces data that is needed at a remote DAAC.
S-PLS-02220	NEW	B1	functional	test	unverified		The PLANG CI shall store a Planning Data Availability Schedule at the Data Server when a candidate plan is baselined.
S-PLS-02230	NEW	B1	functional	test	unverified		The PLANG CI shall be capable of producing reports that compare the predicted availability of data between the baseline Planning Data Availability Schedules and the current candidate plan.
S-PLS-02515	NEW	B1	functional	test	unverified		The PLANG CI shall have the capability to alter the order of alternate inputs at production request time.
S-PLS-02560	NEW	B1	functional interface	test	unverified	A tile is a rectangular geological region defined in advance by instrument teams.	The PLANG CI shall have the capability to request any given tile by a unique tile identification number.
S-PLS-02580	NEW	B1	functional	test	unverified		The PLANG CI shall have the capability to allow the operator to request, by number or some other unique identifier, all data granules pertaining to a specific orbit of the spacecraft.
S-PLS-02590	NEW	B1	functional	test	unverified		The PLANG CI shall have the capability to group data granules into clusters.
S-PLS-02595	NEW	B1	functional	test	unverified	The relative priorities are to be set up in advance during	The PLANG CI shall have the capability to prioritize DPR's based on clusters.

L4 ID	req_key	rel	req_type	ver_method	ver_status	clarification	text
						SSI&T.	
S-PLS-02600	NEW	B1	functional	test	unverified		The PLANG CI shall have the capability to perform processing and reprocessing of DPRs that occur concurrently.
S-PLS-02610	NEW	B1	functional	test	unverified	These start/stop times are created when a PR is expanded into DPRs. The time differences are entered at Science Software I&T.	The PLANG CI shall have the capability to allow two time deltas to be applied to the output granule start/stop time to create the input start/stop time.
S-PLS-02630	NEW	B1	functional	test	unverified		The PLANG CI shall have the capability to use information from the database as runtime parameters for a PGE.
S-PLS-02640	NEW	B1	functional	test	unverified	Mode refers to instrument mode. Different PGEs may be required depending on the instrument's mode.	The PLANG CI shall have the capability to activate different PRs/DPRs based on different instrument modes.
S-PLS-02650	NEW	B1	functional	test	unverified		The PLANG CI shall have the capability to keep a table of coordinates in order to do tiling.
S-PLS-02660	NEW	B1	functional	test	unverified	These place holders are put into place when a production job is created.	The PLANG CI shall have the capability to create dummy jobs as place holders to reserve resources for on-demand jobs.